Presidential Address given at the meeting of the Surgical Section of The Royal Society of Medicine

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by
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To-DAY IS BY CHANCE the 76th anniversary of the birth of Wilfred Batten Lewis Trotter on November 3, 1872, somewhere on our side of the southern Welsh border and on November 25, 1939, he died. He suffered from spinal caries in youth so that he lay on his back until the age of 16. A year later he entered University College School, leaving in 1891 to study medicine at University College, London. He graduated as M.B. with distinction in medicine in 1896, later gaining a gold medal and scholarship in the B.S. examination, still later passing those for the higher degrees and diplomas. A frail childhood and lack of schooling did not harm him, for he was a highly cultivated person; indeed he attributed the remarkable familiarity with the Scriptures and their wording that betrayed itself in all his writing to the long days when he stayed in bed and read the Bible. If there was in fact anything lacking in his equipment for life, it was in other aspects that some would see defects, the filling of which might perhaps have made his life a more obviously happy one. For example he took little interest in foreign travel, foreign language, foreign countries or even foreigners; he had little appreciation of the unwritten arts; surprising as it may seem, the exquisite discrimination of his taste in letters, in manners, in social contacts, appeared to lack counterpart where music, pictures, furniture, objects of art and virtu were concerned. His artistic taste seemed to lie wholly in the perfection of natural form, thus a good drawing of a flower gave him something of the pleasure that he took in the trees of his Hampshire farm. Yet what schools in our country do bestow artistic tastes where they are not inbred? How many even foster them? What man ever fell short of English gentility because he lacked them? I think that the only real defect that may properly be attributed to an almost home-conducted education, was the absence from his later life of the close circle of friends that most of us recently looked forward to re-entering, when we should have done with the pestilent Nazis. There must have been quality in his education, and it must have come from his home surroundings, though I like to think that my own old school taught him his English Grammar.

I shall not trouble you with the domestic detail of his career and rise in our hospital, but in the Medical Faculty of University College in those

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days were luminous intellects, among which for him the most powerful influences were those of Rose Bradford and Victor Horsley. Medicine he thus learned in an atmosphere of intellectual clarity, but before Horsley's influence was felt, his first chief in surgery was Arthur Barker, an Irishman and of very different type. For Barker and his work he ever after expressed a respect far greater than his rarely shown antipathy to a personality so different from his own. Among Barker's merits were the open mind and eagerness which enabled him to pick out new and real technical advances, usually in Germany, and the dexterity and vigour with which he applied them. He was a great abdominal technician, but of surgical disease as Trotter came to know it, he had little apprehension, and, as one might expect with such a man if of forceful egotistical character, he was always known as The Master. The nickname affords a sidelight on the difference existing between the youthful attitude of the London student and that of his Continental brother. For even among our extremely intelligent, and to the point of cynicism, realistic friends, the French, even among them it is the custom for every surgical chief to be called le Maître, and mon Maître he remains to each of them ever after. Whereas we used the term as a familiar sobriquet that indicated that although with the perspicacity with which we endowed all medical students we saw his virtues, indeed we most of us asked to become his dressers, we hailed the claims of the Master's manner with reserve. It may be that the days of the great man and the habit of pomposity were already ended in London, to linger perhaps a little longer in a more northerly latitude.

But I should make it clear that in smiling at the claims of the grand manner we knew well that it was the Master who introduced into England the practice of asepsis, for from the beginning of the century onwards each dressing in Barker's wards had its own sterilised drum ready every morning. It was he, also, who brought from Courland Schleich's infiltration method of local analgesia, and from Biers in Berlin the practice of spinal. Such was Trotter's first surgical teacher, his very antithesis except in the possession of dextrous hands. Though Trotter never assigned to technical methods anything but a secondary importance, his fingers were skilful partly because he first learned his art from Barker, the man who brought to England so many things now the routine of surgery, but for whom it is probably true to say that technique was surgery. His other early teacher was Rose Bradford, whose brilliance as a physician and lecturer was in contrast also with the personality of Barker, devoid as the latter was of a grain of wit or humour. Already in the out-patients' department Bradford's teaching is said to have been the equal of his later lectures which were attended every morning by the whole school, and by the residents and registrars. Then came Horsley, and if Trotter owed to any the forming of his mind it was to these two. Horsley was again quite different from either of the others. He was a fanatical worker, a habit that Trotter certainly never contracted, and his contributions to

experimental medicine were as truly fundamental as was his work in surgery of the central nervous system. But perhaps if none but Trotter cast Trotter's mind, it was Horsley who formed the detail of his charming manners, for one had but to see the two together to be conscious of the unity of their reaction to externals. Attentive and receptive in conversation on any subject, but in fact contemptuous of confused thinking when revealed, they seemed almost identical. When Horsley had retired from our staff he would sometimes come to discuss cases with Trotter in our wards. Then the mask of manners would be lifted a fraction—but only to Trotter—for while he then became the dresser he had been, the House Surgeon was apparently Horsley's most respected colleague.

In the yet early days of which I am speaking Trotter began to impress and impose his personality on his fellows and his juniors, and from his student days until he joined our staff there flowed through our school a steady stream of men stamped with the technique of his thought, and also with as much of its essence as their respective intelligences permitted. As admirers usually do they imitated, and there are still small tricks of speech by which these men may be recognised to-day. Some have been highly successful, some not obviously so in the worldly sense, curiously few have been surgeons. All are characterised by a thoughtful attitude towards their work and lives and by charming manners. They are the first of his handiwork in human plastics, they are the results of his early psychological operations.

It was at this early time that he was formulating the philosophical conceptions that he enunciated in print a few years later and that at once brought his name into prominence in the thoughtful world. Nevertheless, in our hospital his surgery was already far in advance of his time, for there is a tradition, for which I can find no written confirmation, that he successfully removed a carcinoma of the cervical esophagus while still surgical registrar. Yet there are few records of those days that name him even in our extremely active students' medical society, the minutes of whose meetings are a model. True to his later character he was sensitive and retiring to a degree and was also intolerant of the boredom that such meetings may entail.

Unluckily for Trotter there was at this time among his contemporaries the gifted and dashing young Rupert Bucknall who had qualities that Trotter probably then lacked more obviously than in later life. Bucknall was a good mixer, whose quick wits were more full-bodied and far more companionable than Trotter's, and it was as natural then, as it would be now, that he should be preferred for the next vacancy in our surgical staff. After this failure, which for financial reasons meant much to him, he was appointed to the staff of the East London Hospital for Children, where the effect of his presence seems to have been instantaneous, but by his personality and wits rather than by the volume of work that he accomplished. Nevertheless at that time he offered solutions to two difficult problems in the surgery of children. He designed and carried

out an operation for talipes equinovarus whose conception has been perpetuated in the Steindler operation for pes cavus to-day, and he also invented an operative treatment of congenital torticollis, modifications of which are now our standard treatment, for he excised the whole mass of contracted tissues achieving an immediate and permanent result that was in pleasant contrast with the fiddling and laborious tenotomies and plasters of the day. Characteristically, he did not put pen to paper.

At the same time he slipped into the anatomical department of University College, a scented haven for unemployed surgeons, rapidly gaining fame as a teacher formidable on account of his edged wit, accurate and unforgettable in his demonstrations. For Trotter a year or so of anatomy was time well spent. It was here that the beautiful anatomical practice of his surgery had its foundation, for he was able to synthesise in three dimensions his conceptions of the structure of the body. Few surgeons display so clear a knowledge of anatomy in the round as did Trotter in all his work, and by its virtue he could approach a structure from any suitable point on the surface with certainty and knowledge, so that set operations meant little to him. This clear and unambiguous vision of anatomical relations was the foundation of his early surgical success, for he began to apply it to the deeper parts of the neck, and thus it is probable that Thane's dissecting room gave him the conception of lateral pharyngotomy.

It is obvious that anatomical ignorance may engender either rash contempt or unenterprising timidity, and further that its existence may be cloaked by the use of set operations, which, however boldly they may lead to the depths, often take inadequate notice of the diseases for which they are employed. It was, for example, the discarding of the set operations on the tongue in favour of those designed to remove cancer with everywhere adequate margins that was Trotter's first gift to surgery, and though these operations were for years laid aside in favour of radium, they have now come back into our practice certainly where radium is for some reason either dangerous or unpromising. At the same time the subject of anatomy had the advantage that it was not full of perplexities and contradictions, an all-absorbing study, he had time to think.

At last he had a stroke of luck, for in 1906 Horsley resigned from our staff, I believe over a disagreement with our committee on the subject of specialisation, for as early as this he wished to practise neurological surgery only. It is interesting to note that a desire for the extension of the regional specialisation of surgery existed even then. It is also interesting to see how our overdue realisation of the unity of the body and the interdependence of its working parts is now breaking down the disruptive grouping that came with specialisation. At this present time, for example, the destruction of the sympathetic system in the treatment of high blood pressure is apparently the natural function of the vascular, the thoracic, the neurological and the urinary surgeon, indeed of anybody but the general surgeon, who, so far, seems to be holding aloof from the surprising

tendency of the day to operate more and more for less and less, if I may paraphrase a familiar cliché.

On Horsley's retirement Trotter was appointed Assistant Surgeon to University College Hospital. His practice was negligible, his resources intangible, but he had leisure, and two years later the philosophical world was startled by the appearance of two papers in the Sociological Review entitled "The Instincts of the Herd in Man and Animals." Together they are some 60 pages of large octavo, and though their matter and style are such that one must make continual back reference to the long opening, they show clearly the accuracy of his thinking habits, the certainty of his deductions, the clarity of his expression, the nicety of his language. They were, in fact, new thought precisely expressed, though their pages do not presage the simplicity and cadence of his mature style. If "The Instincts of the Herd in Man and Animals" are his first known fruits of leisure, perhaps also we may attribute the conceptions of living disease and recovery that later characterised his work and teaching as originating in the period passed in contemplation of the dead body, for if he could visualise the bodily structures in three-dimensional relation, his mind could see them in function.

Once a member of our staff, his personal characters rather than the yet unproved importance of his surgery were the focus of attention. His reputation at that time was reproduced in a song by our greatly beloved and now lamented E. W. Twining, "Comes at ten instead of nine, gigantic growths to undermine." This was not an exaggeration and the missing hour, or it might be two, had been spent, I believe, not in a press of work, but meditatively and happily in bed. From early times, for many years, his outrageously well-aimed and piercing witticisms delivered seemingly carelessly by frontal, flank, or rear attack, were the salt of the place. He was not the first to handle such conversational weapons in Gower Street, indeed, he followed a tradition, but efficiency and accuracy and economy of effort distinguished his play with them. The passage of years never discarded them but they ceased to alienate their victims as their use became rarer and an æsthetic rather than a destructive pleasure. For in later years if a slim rapier seemed to threaten a vulnerable part, though touched, this was never penetrated. There was always wit in his formal lectures, in his bedside teaching, in his choice of words for every day, and it had a quality once described as roguish by an epicure* of many things including humour. The fastidious art of his writing and of his ordinary speech was faultless, and its quality of restrained statement is known to the world. To commend it, however piously, is an unnecessary intrusion.

I have tried to present to you something of the man, and must now pass on to his surgical work. In 30 years it ranged over many fields, throughout which period he continued to perform the functions of a

general surgeon both in hospital and in private practice. He liked variety, but not excess. For him an imposing programme of operations had no attraction, nor was he ever of those who value their services to mankind by the superhuman length of their lists. The short catalogue of his publications is an index of his varied interests, which, ranging over the whole body, had one character in common. They centred on the unsatisfactory, the formidable, the things that daunted others to inadequacy or inaction. Indeed, throughout his whole career it was difficulty that fixed his attention to a problem, so that to the day of his retirement an unusually formidable surgical case of whatever kind was like gunfire to a war horse.

The first common disease that attracted him was cancer of the tongue. Forty years ago there were available inadequate intraoral procedures; there was Whitehead's resection of half the tongue, and there were dreadful mutilations like Kocher's removal of the whole tongue through the neck. So soon as he turned his mind to the matter he saw that to remove an organ rather than a disease, especially for a disease that lacked respect for the boundaries of descriptive anatomy was at once an inadequate and a too extensive therapy. Never once did he perform such an operation. Among his earliest case-sheets, dated December, 1906. is a diagram in his hand of the removal of a cancer of the lateral border of the tongue with a half inch margin, which crossed the middle line widely but preserved the tip, so that the function of speech would be little affected. A bilateral gland dissection was done. The patient returned in 1910 with a new growth that was the consequence of leukoplakia as the first had been, and this also was removed. Soon he had the situations of growths in the tongue arranged in his mind with suitable approaches. There were those to be dealt with through the unenlarged mouth, those for which it was necessary to split the cheek for access, and those for which a division of the jaw, either median or lateral was necessary. There were ingenious removals of the inner table of the mandible where growths were adherent. His last contribution was the splitting of the fore part of the tongue itself to approach the vallecula and epiglottis. This final operation was evolved after designing and carrying out a neat little procedure by which a growth of the frenun linguæ may be removed in one piece with the submaxillary lymph glands of both sides, if necessary with a flake of the jaw bone at the symphysis. Not only had he soon arranged the cancers of the tongue as regards operative access, but he had also graded them in terms of the kind of malignancy to be expected in the different clinical types. In the matter of lymph glands at first he used to carry out the extensive clearances named elsewhere block dissections, but he decided early that in the case of the tongue its removal with lymph glands in one piece, after the method of Kocher, was unsatisfactory. He was troubled by the problem of the region intervening between the mouth and neck operations. The evil of the gland dissection was that while it dealt with embolic growth, it left a possibly infiltrated

area in the floor of the mouth. So his final solution of the problem was that where possible the tongue growth and the submaxillary glands should be removed in one piece, that is to say the probably infiltrated area, and that on another occasion the rest of the neck could be cleared. this taking care of the embolic. His observations had led him to believe that in many growths of the anterior two-thirds of the tongue, the submaxillary fascia formed a barrier to the extension of the infiltrative process. Posteriorly, however, the barrier did not exist. In the mouth he habitually achieved healing by first intention, with the exception of slight infections around wire sutures in divided jaws. He relied on the closure of dead spaces, and the application of large muscular surfaces one to another. With limited gland dissections of the neck carried out in one piece with growths of the mouth the same result could be attained. He saw that the body developed local special immunities, especially in normally infected regions like the mouth. The healing of both primary operations on the pharynx, and of their later secondary closures, were compelling evidence of the truth of the conception.

At this time also he was attacking the nasopharyngeal growths whose clinical picture he described with Dr. Wilfred Harris, naming them endotheliomas, by means of osteoplastic temporary resection of the upper jaw, but he soon found that they could not be extirpated thus and abandoned them as inoperable, so that these operations disappear from his case books after 1911.

I will here interrupt the story of his cancer work for another early interest, the surgery of Graves disease. In 1907 this first year he operated upon three cases without a death; in 1908 there were 10 cases, with one death from empyema a fortnight after operation, in 1909 18 with two deaths. But this was not original work, for his senior colleagues Barker and Pollard were then doing similar operations, and Horsley had done many certainly since 1902. In that year he removed one lobe for exophthalmic goitre, and the other in 1904 for recurrence of symptoms. In 1906 he transplanted a piece of thyroid into the lady's abdominal wall to combat the resulting myxædema. All these operations for Graves disease were carried out under chloroform anæsthetics. Trotter's method for years was hemithyroidectomy followed after a pause of some months by a less extensive operation on the other side. The results so obtained were in no way inferior to those that follow the modern subtotal thyroidectomy; indeed I have the impression that they were better and more certain but cannot substantiate it. It is interesting in the records of some of these early operations to see notes in Thomas Lewis's handwriting regarding cardiac irregularities, though auricular fibrillation is not mentioned. It is evident that at this time, long before the introduction of iodine therapy, these operations were not the death-dealing procedures that many have imagined, nor did they deserve the condemnation with candle and book that they received from physicians about the year 1910.

To return to malignant disease about the mouth, the growths in the posterior part of the tongue that often involved the pillars and the jaw led him to the pharynx, which at first he approached through a divided lower jaw. In 1909, however, he removed a growth of the arytenæpiglottic fold resecting the ala of the thyroid cartilage on the way for access, and I believe this must have been his first lateral pharyngotomy.

The story of the recognition of the varieties of tongue carcinoma was repeated for the pharvnx and he soon established the truly remarkable sex distribution of the various pharyngeal growths. I feel sure that in these observations he was helped by a number of laryngologists, notably Herbert Tilley and E. B. Waggett. In his Hunterian lectures in 1913 this work was presented and it is remarkable in these days of percentages and logarithms that the very few cases that Trotter had at his disposal, an inadequate figure by Continental standards, afforded him all the observations necessary. He stated for example that post-cricoid carcinoma, meaning of course the growth that begins in this region, not primary esophageal cancer that has spread upwards, occurs exclusively in women. The absence of operative exposure when radiotherapy is used, has since resulted in a lapse into confusion, but I wonder if anyone has ever seen a true post-cricoid growth in a man. In spite of small numbers this paper has stood the test of time, and the obvious comment is that accurate observation followed by accurate thought is a straighter route of progress and less encumbered, than the collection of figures, especially of other peoples', the so-called statistical method.

His work in the pharynx had begun with the proposition that there was neither reason nor virtue in the customary removal of the larynx for cancer of the pharynx, a truth obvious 40 years ago to Trotter alone, but self-evident to us since he pointed it out.

Next, he turned his attention to the larynx, and carried out radical removals of growths by partial laryngectomy with preservation of the voice. In all these pharyngeal and laryngeal operations an important part was the prevention of serious infection of the neck and of spread of infection to the mediastinum. The latter aim was accomplished by suture of the sternomastoid to the longus colli. When he had learned to reduce or abolish infection of the neck after resections of growths of the pharynx, secondary closures, reconstructions of the pharynx and larynx from the skin of the neck became precise operations with little resulting scarring or stricture, a complication that was troublesome in some of the early cases. He came to rely on careful exposure with no unnecessary opening of fascial places and on the local immunity of the tissues to their own particular bacterial life. The only chemotherapy that he used were the protection of the neck with perchloride packs while the pharynx was open, and sometimes the filling of the open neck with boric acid powder, usually with an apology to the supposed moderns that were present. Once the pharynx could be opened without fear, the problem of the pharyngeal pouch was solved and I doubt if he ever did anything but

the removal in one stage, that is now the established procedure and that has displaced all others. In the years before the 1914 war, with H. Morriston Davies he placed renal hypernephroma in its present clearcut position as a malignant entity with individual habits, his contribution being untouched by any later disputes as to its correct naming. With Charles Bolton a little later he described the nature, symptomatology and operative treatment of gastrojejunocolic fistula, from observation of, I think, four cases. These last two were formidable diseases encountered by a general surgeon in his ordinary work, but for originality of conception it is probable that his work on the nervous system was the equal of that in malignant disease.

His first entry into this field was the section by himself and H. Morriston Davies of certain of their own cutaneous nerves and the observation of the effects, and of the quality of returning sensation. These experiments failed to confirm certain current views regarding epicritic and protopathic sensation, and like the rest of his work their conclusions have stood the test of time. His next contribution was the publication of a clear account elaborated from the study of a very few patients of the, at that time, little understood condition of chronic subdural hæmatoma, a description that established its relation to injury and that again has needed neither alteration nor addition. In these early days he was known to us as our neurological surgeon but to only a limited circle outside our hospital. When, however, there appeared in Choyce's System of Surgery an article on the surgery of the brain, in this subject he also assumed the position of a leader for Horsley was now dead having succumbed to malignant malaria in Mesopotamia during the first world war. Included in this article was a section on injuries discussing their probable morbid anatomy and physiology and the nature of the associated disorders. It is largely original, and records observation and thought that might have been embodied in years of contributions to journals by lesser men, and again his conclusions were reached without a single reference to collected figures. Not quite all of this is firmly established for all efforts to demonstrate by experiment his physical explanation of the phenomena of concussion, have failed to prove that there is in fact a sudden enormous increase in intracranial pressure from temporary deformation of the skull, nor does his conception of generalized contusion of the brain as the cause of postconcussional symptoms find complete acceptance at the present time. Insistence on an organic rather than a psychological origin for such troubles is the lesson he taught, though his explanation of their pathogenesis may need amplification or modification.

So far I have tried to recall a little of the making of a famous surgeon. Now I wish to attempt to tell you something of what he meant to us in our hospital. Among the many things that he taught us by example was the approach to patients. In the out-patient department which it was his pleasure to attend to the end of his time it was his habit to listen attentively to the longest and most rambling story alike from the neurote and the husky

old slum lady, with the same courtesy that he probably paid to duchesses. a group of patients whom, unlike some eminent doctors, he never was heard to mention. He never interrupted, but gradually led by agreement and sympathetic inquiry to things that might be important for the matter in hand. This charming delicacy of approach to the mind and personality was then equalled by the extreme gentleness of his physical examination. for I think I never saw him hurt a patient. One of his stock complaints about doctors was their too common neglect to observe the elementary principle that to secure co-operation patients must not be unnecessarily hurt and never unwarned, and for Trotter the interpretation of unnecessary was strict. He would instance the well-known consequence of this kind of failure, in the response of the patient who, asked "am I hurting you" so frequently says "not yet doctor." Yet when a patient had left it was clear that the sympathetic approach that in fact transformed his patients of whatever class, education or intelligence, into his slaves, disciples and worshippers, so that they listened to him as to none other, was not the uncritical sympathy of the missionary. For his subsequent dissection of the story and often of the patient's mind, was apt to be amusingly destructive, sometimes by no means strait-laced, and if the patient had been a thought superior, perhaps as contemptuous as his handling had been courteous. Having been his dresser and Barker's, I had the luck to be his first house-surgeon when he was appointed to our senior staff in 1914, in which year, for the first time, but not for the last, I learned to dislike the Germans, whose pugnacity cut short by some months a time when I seemed to be on the pinnacle of existence. His teaching methods with me and my dressers were really an amplification of his approach to patients, but we were honoured in that he used to permit himself the free exercise of his lambent wit, the effortless placing of his sharpest darts straight into our self-consciousness. The resulting thickening of our skins has stood us in good stead ever since. From his point of view our minds were as clogged and muddy as the patients', but it was his task to teach us.

Always concerned with principles he would patiently talk to us and try to kindle in us some spark of cerebration on the matter in hand. A witty or a depressed comment would show that he had failed as he had indeed expected, but he would patiently try again and again, until it was obvious, even to our thickheaded selves, that we had been led by observation, thought, and simple reasoning, to some clearly useful deduction, commonly one with immediate and practical application. A thoughtful consideration followed by a practical conclusion was his usual method and never the one without the other where a patient's welfare was concerned. Once when he presided at a dinner I pointed to this character in his approach to clinical problems and was rewarded next day when Trotter took me by the arm to thank me for what he said was the greatest compliment of his life. He was tired of being fêted as a philosopher, no one else had ever called him practical. He said that he

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was glad that he had at least impressed somebody with the idea that the brain is of some use. The intimate relation between observation and deduction that characterised all his work was seen in his knowledge of patients' states during operations. Warnings from the anæsthetist were superfluous, in fact such cautions tended to pass in the reverse direction, and to be extremely amusing. He would never have blood pressure recordings during extensive procedures on the brain for, exposed, it was a manometer to him. Indeed all tissues revealed their states to his apparently casual glance. The following incident illustrates his capacity to interpret quickly what he saw. Many years ago, at his request, a housesurgeon was removing a child's tonsils. Trotter walked in, his eyes as usual on the ground. They saw no blood on the floor, and lifting confirmed the conclusion that the child was not breathing. Attention to the tongue and one or two compressions of the chest restored both respiration and bleeding. It was a matter of seconds, and danger over he left the room, his eyes again on the ground, softly murmuring "very nearly dead."

Why was it that in our, at that time critical and candid, school he came to receive a respect and adulation that in a more normally conventional tribe would have been plain hero worship? It was because the clarity of his thought led infallibly to perfection in his work; because the skill that he employed in its execution was the match of its thoughtful inception: and because his bearing towards his patients was in its sensitive courtesy the complement of thought and dexterity. Probably no school could at that time have been better suited to the development of his qualities, for the habitual pathological truth of his estimate of disease and of the real effect of therapeutics was not of his introduction. But he specially and continually taught us by word and example that since our work is conducted on people and not on their bodies, an intellectual conception of disease as opposed to the rule of thumb, implies the exhibition of sensitive and gentle sympathy. The peculiar quality of his approach to the sick was a gentleness that had nothing of the feminine, nor roots in affection for his fellows. It was gentle because his brain made it so and thus it was highly efficient in attaining the therapeutic results for which it had been designed. It was enough that the working of his brain wrought the expected effect; that it made of every patient a worshipper, of every doctor a lifelong adherent, and of every junior an envious and despairing disciple, was a secondary and often fatiguing issue.

His operative methods matched the perfection of the rest. Simplicity of equipment, exclusion of the unnecessary, deliberation, manual ambidexterity, and the gentlest of touches made up a style in which there was no element of display. He understood that surgery is not carpentry and that once the surgeon has effected some simple form of temporary repair or readjustment, the real joinery is done by the body. He thus disliked any concentration on technique and the tendency of so many surgeons of his time to confuse it with surgery. Technique was for him the capacity needed by every surgeon to do his work with minimum trauma and

minimum pain to the sufferer. It was the necessary equipment of all surgeons and needed no more than passing comment, for why should one teach one's colleagues the elements of their job? So simple, clean, tidy and efficient, were his methods that there were those that their perfection escaped, from whom their art was concealed. They missed the burnished ornaments of the altar, the ritual, the white assembled acolytes. A very famous surgeon* once made this mistake when, in our theatre, he told Trotter that his brains were outstanding but that he had no technique. At Trotter's urbane reply that he valued so great a compliment from such a source the great man purred, but a little doubtfully, I think just conscious that there was a hint of obliquity in the exchange of compliments, but fortunately having no inkling that he was in fact being told that his surgery must be still in the elementary stage of carpentry. No one, it was said of Lord Melbourne, ever happened to have coats that fitted better.** No one ever happened to operate so simply and effortlessly as Trotter. It was great art concealing a greater.

Returning from the first war I found that Trotter had now assumed his place. The five shattering years had dragged through their destructive if usually boring course, but during them an unusually intelligent member of the Government had had the sense to ask Trotter to republish his essay on the instincts of the herd, as the basis of a book that should explain the Germans to the world. All of us have read it and all of us now know that his prophecy has been twice fulfilled, how the herd of wolves when it at last feels its enemy to be the stronger, will not become closer knit, but will rather lose its cohesion, disperse into individuals, and run.

One cannot be thought guilty of political prejudice if one senses the lack of similar brains behind our leaders to-day.

Trotter was now the acknowledged brain of surgery in Britain. He was sought in difficulties of every kind, and in the mouth, the pharynx, the thyroid, and the central nervous system, he was supreme. London seemed to be full of doctors who wanted no other opinion, he skimmed the cream of practice. He had the Royal Appointment and justified it by his help during the illness of His Majesty King George V in 1928. But he already preferred the seclusion of his Hampshire farmhouse to the lure of the enormous practice that was his for the assembly. He never was attracted by the lure of numbers nor by what it is now fashionable to call the team, for his work in private and hospital practice was completely personal in its character, so that even post-operative dressings were his own care, even if they shortened his week end escape.

After some years more the later period of his life was entered, for just as the life of Louis Quatorze, the Sun King whose personality and mind were utterly unlike Trotter's, was divided by serious illness into two periods, the brilliant and the quiet, so was Trotter's, by a malady

^{*}Lord Movnihan

that left a permanent frailty permitting neither exertion nor long hours of work.

It chanced that about this time the development of radiotherapy in the treatment of cancer attracted large numbers of sufferers to the apparent miracle, and that among these were included the victims of cancer of the upper respiratory passages. Thus his need for rest coincided with a rapid reduction in the volume of his work. None was more anxious than he for the success of the new agent, for if such wonders could be accomplished for the inoperable cancers surely the operable ones might be similarly benefited.

He smilingly said that his operations had not had a chance. His patients would certainly not have agreed with him then, nor do I think that now, twenty years later, would any surgeon. For dissections of the neck are the rule again, operations for cancer of the tongue and mouth are frequently performed, and these operations are those of Trotter such as I have shortly described them.

Would anyone at the present time confidently assert that to a woman suffering from post-cricoid carcinoma, radiotherapy has anything better to offer in substitution for lateral pharyngotomy?

The later stage of his life had, however, undoubtedly set in and in our hospital it was hard to see his failing physique. Some change had to be made and he might have done what others have in like misfortune, he might have left hospital work to his deputies and continued private practice. Not Trotter, for on a certain April day he gave up private practice but continued his hospital work without interruption. Shortly afterwards Mr. Choyce, our whole-time professor of surgery was unluckily forced to resign, also from failing health, and we persuaded Trotter to succeed him for his few remaining years of office. For about three years he was our professor and this was indeed fortunate for a group of assistants. For at once the Surgical Unit became a surgical nursery. However brilliant a young man may be and however responsive, to teach him even the niceties of the cure of hernia, is neither recreation nor attractive duty, yet Trotter spent many such hours in the theatre during his last few years, evidence that, intolerant as he was of boredom, he could subdue his inclinations in favour of that which he had laid down for himself as the professorial function. To some it may seem curious that this great and gifted surgeon famous for his scepticism, for his devastating criticism, and for his personal remoteness, should dedicate his last remaining years to his juniors, but the reason is not far to seek. If his own brain had been the source of surgical progress he must do something more than teach others what he himself had learned. He must complete his task by educating the brains of others, polishing their processes of thought so that they in turn might be imbued by his lifelong conviction that the brain is of some use. And he liked young people.

Honours came to him. The Council of the Royal College of Surgeons for the Presidency of which he had neither the health nor inclination.

The Royal Society in 1931. Honorary Surgeon then Serjeant Surgeon to His Majesty the King. Presidency of the Association of Surgeons, the Gold Medal of this society in 1938 and many honorary degrees. It was no secret that the Royal Society and the Royal College paid special heed to his counsels. Unfortunately about this time his health began seriously to fail and for the rest of his life he preferred to perform only those public functions that he knew were the duty inherent in his exceptional gifts. In 1932 he delivered at the Royal College of Surgeons the Hunterian Oration taking as his subject "The Commemoration of Great Men." In this remarkable lecture he chose the theme that it would be better to help great men during their lives than to commemorate their deaths. It was in the best style of his maturity, its penetrating criticisms, its crystal wit, the polished art of its wording affording his hearers a momentary entry into the working of his mind, a flashlight on the originality and range of his thought. His choice of language on all such occasions, as in private conversation, was appropriate to the keenness of the matter, and often modelled on the scriptures but lacking their repetitive habit, its biblical simplicity gave him a personal and epicurean satisfaction.

The Commemoration of Great Men is one of ten addresses that have been bound together in a memorial volume by the Trotter Memorial Fund of University College Hospital. They were delivered as opportunity offered to greatly differing audiences, for he was sure of packed houses, and afterwards of readers everywhere. All were prepared with the greatest care, with long consideration and repeated rewriting, as much, I think, for his own pleasure as for that of his hearers. I doubt if any student of Trotter's writings could find any real evidence of intellectual growth during his life, though I naturally also doubt my capacity to assess such a possibility. But his style shows considerable change within the limits of a fastidious taste. When I first knew him he often quoted George Meredith, evidently sharing this author's literary ideals, which dictated that every word must be selected for exact meaning and emphasis, and must then be set into place where it fitted like a part of a machine. The machine, however, could not be called a fast- or a smooth-running one, and a result of the method is that few sentences can be understood and their meanings completely assessed at the first reading. He also seemed then to be fond of Robert Louis Stevenson, savouring happily his adjectives, his similes, his careful though apparently light hearted construction. Later he came to favour a simpler style and I venture to quote and to compare two extracts from Trotter conveying almost the same idea. The first is an early one from "The Instincts of the Herd": "Man's resistiveness to certain suggestions, and especially to experience, as is seen so well in his attitude to the new, becomes therefore but another evidence of his suggestibility, since the new has always to encounter the opposition of herd tradition." Every word has its special importance but the whole needs reflection before the full meaning is grasped.

The second is from the last paragraph of his final address, that to the students of St. Mary's Hospital: "We like to suppose ourselves easily receptive of the new, and that by virtue of a natural mechanism. Unfortunately, this is the exact opposite of the truth. The mind likes a strange idea as little as the body likes a strange protein, and resists it with a similar energy." The sentences are short and vigorous, their meaning at once clear. Yet the style of these later papers is the development of the earlier, a polished prose almost concealing the art of its composition, and felicitous in choice and use of words in their exact meanings. The words were clearly those of a literary æsthete of pure and primitively simple taste. He never fell into the common error of making the words more important than the matter. At the same time there bubbles throughout them a peculiarly impish and attractive humour that is reminiscent of Shaw at his best and least provocative, though Trotter's is the sharper and is wielded with greater delicacy of touch. A hundred years before the first of these quoted sentences was written, Lord Melbourne in his youth made the observation that man could learn only by experience. A hundred years before the second, he said "Nobody ever learns anything by experience, everybody does the same thing over and over again." Here is something that Trotter saw plainly when quite young, but that took a great realist a lifetime's disillusion to learn. I cannot leave the subject of Trotter's writings without a reference to the wide extent of his reading in every sort of subject. Although the greater part of his contribution to knowledge came from his own brain, he was not in any sense indifferent to the workings of those of others, rather he was fascinated by them.

It needs no more than your presence to-night to confirm my impression that Trotter's memory is a living influence, after nine years he is not relegated to the dated pigeon-hole that is the niche of most eminent surgeons. His vital persistence is due in no small degree to the contents of this slim volume*, which, I was recently told by one of his colleagues on the Royal Society, are quoted more and more widely as the years pass. No one in our time was more justly appraised during his life, and it seems likely that to perpetuate his memory no orations are necessary. He was not attracted to formal solemnities of the kind, indeed his own point of view regarding them may be thought to be expressed a little crudely in an epitaph from the eighteenth century deciphered in a country church-yard by Sir Leslie Stephen:

"Traveller pass on nor waste your useless time In lying eulogies or far worse rhyme. For what I am this mound of earth assures, And what I was is no affair of yours."

^{*} The Collected Papers of Wilfred Trotter, F.R.S.



Wilfred Trotter

There are few good portraits of Trotter, they are mostly posthumous, clayey, and without life. This that I show you is a little different from the others for it is a small silver relief by Mr. Paget. It is with an uncomfortable sense of impiety that I look at this photograph because I remember an occasion when at a meeting of the council of the Association of Surgeons, Trotter disposed of a suggested demonstration by saying simply "Slides are substitutes for ideas." This medal is the best portrait of Trotter that I know, and was struck at the wish of the Trotter Memorial Fund. It is the first surgical award that a new student may gain in our hospital, it is given for clinical surgery. We are sure that this is the commemoration that he would have chosen for himself, we hope it is not a substitute for ideas, we try to make it a reward for them.